

including September 21, 2003. Accordingly this Amendment and Response is timely filed.

In response to the Office Action of May 21, 2003, kindly amend the application as follows:

**IN THE CLAIMS:**

Please amend claim 1 as follows

-- 1. (Twice Amended) A manufacturing method for an optical fiber grating comprising the steps of:

loading hydrogen in a material optical fiber for forming the optical fiber grating in order to increasing the photosensitivity of the optical fiber when necessary;

forming a grating part having a periodic refractive index distribution by irradiating an optical fiber along the longitudinal direction with ultraviolet light at a predetermined period and carrying out dehydrogenation when necessary;

carrying out at least once uniform ultraviolet irradiation processing that irradiates the grating part as a whole with ultraviolet light;

carrying out at least once heat trimming processing that uniformly heats the grating part as a whole at a predetermined temperature and time; and